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Certain Factors Found to Improve Mail Survey Returns

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Introduction

During the past two years the Driving Research Laboratory at Iowa State College has been using return postcards to obtain data on certain aspects of driving and driver's habits. Since the return of the postcards has a definite effect on the value of the survey an effort has been made to determine how the percentage returned may be increased.

The first use of the postcard described here was in connection with a traffic survey. The problem was to determine the hourly use of the roads by age and sex. The procedure set up has been for an observer to estimate the age and record the sex of the driver as the vehicle passes a selected observation point. In an effort to verify the observed information a double postcard was sent to the owner of the vehicle which passed. Names and addresses of the owners were obtained from the State automobile licence files. On the return postcard the owner was requested to state the age and sex of the driver, the number of persons in the car, and the number of miles driven by that driver the hour of the day he was observed.

Procedure and Results

The first postcard designed for the traffic survey had essentially the following items intended to motivate the individual to return the card.

1. A notation of the number of persons killed in Iowa during the past year.
2. The statement that the Driving Research Laboratory at Iowa State College is trying to develop ways of reducing traffic accidents, and that the success of the study depends upon the owner's willingness to return the card properly filled out.
3. A sentence stating that the reply would be held confidential and thanking them for their cooperation.

The second postcard had essentially the same items, but with the addition of the statement that their vehicle was selected only on the basis of chance. Also it was stated that the objective of the study wasn't to observe for violations and was in no way connected with any law enforcement agency.

The third card was identical with the second except for the addition of the following sentence—"Please do not let your failure to

return this card make it impossible for us to obtain a 100 per cent return."

The per cent returned and the chi-square values between the cards are shown in Table 1.

Table 1

Comparison of the Three Postcards

Card	N Sent	Per cent Returned	Cards Compared	Chi-Square	Confidence level
1	318	46.8	1 and 2	3.724	0.060
2	477	57.0	2 and 3	3.210	0.080
3	2040	64.3	1 and 3	13.464	0.001

Although the difference for each change of the card only approaches statistical significance, the difference between the first and third card is highly significant.

In another survey 1464 postcards were sent to residents of Minnesota. Information requested was how the person learned to drive, the number of miles driven in the last year at different times of the day, and several other incidental items concerning his car and driving practices. Using the card as originally printed, 1189 were sent out and 19.6 per cent of them were returned. This percentage is comparable to that obtained with the same card used in Iowa. On 275 cards the sentence, "Please do not let your failure, etc.", was added in long hand. The percent returned was 32. The chi-square between these two groups of cards was 15.67, which is highly significant.

Identification was needed on the return post card for both surveys to make it possible to match the information from the post card with what was already available. For this purpose, a number was placed in the upper left corner of the address side of the post card. It was disguised somewhat by the method of printing, "Return to (case number) Ames, Iowa." The question arose as to whether the visible number reduced the per cent returned. As a test of this hypothesis, invisible ink was used on each alternate card for the Minnesota survey, and on 1000 of the cards on the traffic survey as described in the previous section. The per cent returned and the chi-square obtained are shown in Table 2.

Table 2

Comparing Visible and Non-Visible Identification

Sample	Per cent Returns		Chi-square
	Visible Numbers	Non-visible Numbers	
Minnesota Survey	21.7	22.4	0.078
Survey Traffic	64.6	65.8	0.054

Conclusions

From the experience obtained to date in the use of double return postcards for obtaining data, the following conclusions may be stated, subject to the nature and limitations of the study.

1. For obtaining returns from drivers the type of information requested is not the only factor influencing the per cent returned. In other words, the method used in requesting the information does have a significant effect on whether the card will be returned.
2. Apparently the driving public does not feel the information requested to be highly personal—at least not to the point of requiring their reply to be anonymous.
3. The results suggests the importance of careful study of form and composition for best returns when mail surveys are to be used.

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